United Nations Environment Programme

EP

Distr.
GENERAL

UNEP/Bio.Div.3/4
12 June 1990

ORIGINAL: ENGLISH

Ad Hoc Working Group of Experts
on Biological Diversity

Third Session
Geneva, 9-13 July 1990

Current Multilateral, Bilateral and National Financial Support for Biological Diversity Conservation*

Executive Summary

* A study prepared by A. Markandya, Metro-Economica Ltd., (London, UK). It has been reproduced without formal editing.

Na.90-2349

CURRENT MULTILATERAL, BILATERAL AND NATIONAL FINANCIAL SUPPORT FOR BIOLOGICAL DIVERSITY CONSERVATION

EXECUTIVE SUMMARY

The purpose of this study is to make recommendations on the funding requirements for a proposed global conservation of biodiversity, following an assessment of current expenditures and activities in this field. The need for an international convention governing the conservation of biodiversity was identified at the second session of the Ad Hoc Working Group of Experts on Biological Diversity, held in Geneva in February 1990.

The first section of the report examines the problems of biodiversity loss, and the need for maintaining biodiversity. In order to achieve conservation of biodiversity, a population greater than the critical minimum should be maintained in its natural habitat. There are no accurate estimates of the total number of species, but estimates have been made of the current rate of loss of species; between 5 and 30 per cent of existing species are threatened with extinction over the next 20-30 years. Biodiversity can be lost through habitat modification, overexploitation of natural resources, chemical and global pollution and the introduction of new species into an environment. The reasons for maintaining biodiversity are: the values of species derived from their very existence, and economic and the ecological benefits derived from the exploitation of natural resources. Until recently, there has been little effort to place monetary values on these benefits which, combined with institutional difficulties of capturing these benefits in a sustainable fashion, has resulted in an alarming rate of loss of species. Because of the uncertainty of future benefits of conservation and because many natural resources are common property, the role of governments is particularly important in ensuring that sufficient resources are devoted to conservation. Furthermore, the agreement between governments to conserve global resources is important. At the same time it has been shown that governments can, through inappropriate policies, be as responsible for the loss of biodiversity as any other 'cause'. Such 'perverse' policies work through tax credits and subsidies and need to be corrected if the problem of biodiversity is to be resolved.

Since many developing countries are responsible for the conservation of a large proportion of natural resources but are lacking in the resources required to undertake the necessary actions, it will be necessary for developed countries to provide financial assistance to developing countries from public and private sources to undertake the measures required, as well as for the developing countries themselves to mobilise new sources of funds for conservation.

The second section examines current support for conservation measures, including an estimate of funds provided to developing countries for the purposes of biodiversity conservation. Four types of action have been taken to date: measures to protect a particular habitat, to protect species *in situ*, to conserve species *ex situ*; and measures to curb the

contamination of the biosphere with pollutants. In some cases these measures have been formalised through conventions; and funded and implemented by international organisations, by developing countries themselves and by non-government organisations.

An attempt has been made to estimate the expenditures on biodiversity conservation activities in developing countries. Expenditure data on all conventions were not available, but for the four major global conventions, a total of $6.3 million a year had been allocated. Expenditure by developing countries on conservation is very small and is not usually even shown in government accounts. Data on international organisations' expenditure on conservation activities were collected, which showed that, on the basis of the latest year for which data were available, these organisations spend about $58 million a year on biodiversity related projects. This amounts to a very small proportion of total expenditure on environment related projects; for example, of the 1988 UNDP budget only 3% was allocated for biodiversity projects. The largest component of multilateral expenditure on conservation is undertaken and administered by FAO, partly with its own funds, and partly with funding from UNEP, UNDP and other agencies. The most important bilateral donor countries in this field are the United States and the Scandinavian countries. The US is estimated to have spent bilaterally funds (both government and non-government) of $37.5 million in 1987 for biodiversity conservation in developing countries. Unfortunately similar figures were not available for the other countries.

These expenditure estimates highlight the relatively low priority currently being given to biodiversity conservation, by developing countries, developed countries and international organisations.

If an overall estimate of the flow of assistance to developing countries were to be made, it would amount to roughly $228 million. This includes $58 million in multilateral aid, and an estimated $170 million in bilateral aid. The later figure is very approximate, and is based on the assumption that other countries contribute to biodiversity in the same proportion as they do to total aid.

The areas which require funding are identified in the third section, and estimates made of the resources required to achieve the goals of biodiversity conservation. In addition, the best means of mobilising the required funds and the role of an international convention in achieving the goals of biodiversity conservation are also addressed. The recent Ad Hoc Working Group of Experts on Biological Diversity identified the following areas which require further funding:

(a) surveys, inventories and identification of biological diversity rich areas;
(b) development of technologies related to the conservation and sustainable use of biological diversity;
(c) technical assistance for research, training, education, public awareness etc;

(d) management strategies and plans for biological diversity rich areas, including recovery plans, coordination of various conservation activities and development of national conservation strategies;
(e) regular monitoring of the status of the world biological diversity;
(f) coordination of conservation strategies with policies for sustainable economic development;
(g) priority conservation projects; and
(h) transfer of technology.

Each of these is discussed in turn below.

(a) As already noted, there are very little data on the biodiversity of the planet and the management of natural resources requires information on the quantities of species and on their habitats. Surveying species is expensive but techniques are being developed to use local populations in the work and thereby cut the overall costs. As the benefits of improved information on biodiversity are to be gained by users of products derived from natural sources, the funding for this activity could partly from taxes on royalties from patented biological materials and possibly from a tax on tropical timber imports.

The overall cost of undertaking this activity is potentially enormous. Estimates indicate costs of around $330 million to survey an additional 10% of the plant and other species, ten times that amount to conduct complete habitat and ecosystem surveys, and ten times that amount again to conduct complete genetic surveys. It is inconceivable, however, that such activities could be carried out in a short period of time. It would make sense to think in terms of a program over a period of 20 years or more. At the same time there would be a great need to prioritise work in this area and to relate that to some estimates of the potential benefits of alternative activities.

(b) In the development of technologies, biotechnology is the critical area. It can assist in the conservation of genetic resources and evaluation of germplasm for specific traits. Again this could be funded by enterprises that profit from the use of biotechnology. Initially a small budget (perhaps derived from the kind of taxes identified above) could be a beginning. This could also be used to support research into biotechnology in developing countries.

(c) Training of future conservationists and other professional staff is an important area for assistance. A considerable part of existing resources are devoted to this activity but there is strong feeling that more needs to be done. The IBPGR have identified the need to increase their training programme by around 400-500 individuals at the postgraduate level. IBPGR has, of course other activities which it supports. These are discussed further under the other categories. Funding this would cost around $10 million a year. Another estimate is provided by IUCN, indicating the need for 7500 more taxonomists. Providing these over a ten year period would cost around $45 million a year.

(d) Management strategies for protecting and conserving areas of importance in terms of biological diversity need to be considerably strengthened in developing countries. Existing resources are inadequate and more funds could be mobilized by exploiting the commercial values of these sites. However, it is important to ensure that the funds so raised are actually allocated to conservation. The same applies to proposals such as an eco-tourism tax.

Another fairly successful method of raising resources for conservation has been through debt for nature swaps. In the five countries where they have been tried they have contributed to the protection of small but important sites. If they are to be expanded, however, debtor governments need to be more forthcoming and local NGOs need to develop a capability to implement the programmes. In some cases, it has been proposed that sites be managed internationally, which may require support from a central fund (after allowing for any revenues from the management of the site itself).

Finally under the general heading of coordination there is a clear need for an umbrella body to undertake such work. This is discussed further in the final section of the report.

(e) Regular monitoring of the state of the world's biological diversity is an essential task that would extend the work already being undertaken by the IUCN and other bodies. However, a small programme to synthesize the activities of all the agencies involved in the field would be very helpful. A initial budget is proposed for this, of around $2 million per annum. This would also permit the commissioning of primary data collection in some areas.

(f) Appropriate national policies for sustainable development need to be coordinated with the conservation strategies. This requires, on the negative side, the impacts of macroeconomic policies, such as taxes and subsidies, to be examined with regard to their effects on the biological diversity; On the positive side, it requires policy instruments to be designed so that incentives are present for countries to exploit their resources in a sustainable manner, thereby enhancing the chances that conservation takes place. The main assistance that can be offered in this regard is with respect to an economic input into the National Conservation strategies and Conservation Management Plans, and for an environmental perspective to be included in the macroeconomic planning. Both are of great importance and would imply technical assistance to developing countries, as well as some training. UNDP is the most suitable institution to carry this out.

(g) Priority conservation projects are an important area for future funding. There are some sites and species where, unless emergency action is taken, habitats are threatened and extinction is a real possibility. One of the tasks of any putative organisation dealing with biodiversity would be to identify those areas and species which could draw on a special fund.

(h) Finally there is the transfer of technology. New methods of conservation, and products developed through biotechnology can help the process of conservation. Those undertaking the development would have to be compensated if they were to give access to their technology to the developing countries. This would require funds from a central source. At the same time, the benefits of the commercial exploitation of products should be more equitably shared between those concerned with research and development, the plant breeders and the farmers. The FAO Commission on Plant Genetic Resources addresses some of these issues. Another possibility is to give suppliers of genetic resources preferential treatment to the products obtained from gene banks established with international funds.

The final section of the report looks at the reasons for a new convention on biodiversity and what its terms of reference should be. First there is a need for a global strategy on biodiversity and that can only be coordinated through an international agreement. Second, although existing conventions cover many conservation issues, there are still gaps that need to be filled.

Present conventions address specific issues but not the whole area of biodiversity as such. Second, they do not concern themselves with the transfer of resources and support for biodiversity conservation in developing countries. Some link between the stated objectives of conservation and the commitment of parties to support conservation in a global context is required.

It is essential, of course, that any new convention take account of the existing conventions and the activities that they support and not duplicate them. The treaty needs to ensure that the benefits of biodiversity protection are reflected in the policies of the member countries that impinge on biodiversity. It also needs to involve itself with issues of international transfers of revenues from taxes on products derived from the commercial development of biodiversity in developed countries. The framework within which such taxes would be levied would be a matter of concern for the convention. Finally it needs to act as a facilitator for the private sector in developed countries to transfer its technology to the relevant institutions and individuals in the developing countries.

One question addressed at the beginning of this report was to do with the size of the fund required to achieve the unmet conservation needs of developing countries. It is not possible at this stage to give an overall figure for this. Certainly many of the required resources do not need to be raised from a central fund, but to be mobilised from a more effective commercial (but sustainable) exploitation of the habitats and species in the developing countries, as well as from non-government direct assistance. This includes tourism, use of forest products, and wildlife. However, additional resources will be needed from a central fund, to which member countries should subscribe. This would be channeled through existing institutions such as UNEP, FAO, UNDP and the Development Banks and would cover support for training, priority management of sites and

species, transfer of technology in appropriate areas and monitoring of global changes in biodiversity. From the analysis in this report it would appear that the size of such a fund is more likely to be supply constrained rather than constrained by the demands for further work in this area. Limiting factors will be: the capacity of developing countries to undertake and organize the relevant work, and the perceived benefits of individual parts of the program to those who stand to gain in a direct sense from it. In the light of these consideration it is unlikely that the fund required could be very large; certainly not in the first instance of the order of billions of dollars as stated in a recent World Resources Institute report.